APPENDIX

- 1. An improved distributed Bragg reflector comprising:
- a sampled grating, including a plurality of sampled grating portions having a first grating phase separated from each other by portions with no grating; and
- a first grating butst portion, at a beginning of a first one of the sampled grating portions, having a second grating phase, wherein the second grating phase is different from the first grating phase.
- 2. The reflector of claim 1, wherein the second grating phase is substantially opposite that of first grating phase.
- 3. The reflector of claim 1, wherein the first sampled grating portion and the first grating burst portion are spaced apart and configured such that maximum values for a coupling constant (K) are substantially uniform across a selected tuning range.

4-10. (CANCELLED)

- 11. The reflector of claim 1, wherein the portions with no grating occupy more than 70% of the reflector.
- 12. The reflector of claim 1, wherein the first grating burst portion is spaced apart from the first one of the sampled grating portions by a spacing with no grating.

13-16. (CANCELLED)

- 17. A distributed Bragg reflector comprising:
- a sampled grating, including a plurality of sampled grating portions separated from each other by portions with no grating;

wherein the sampled grating portions each have a first grating phase and a second grating phase.

18. The reflector of claim 17, wherein the portions with no grating occupy more than 70% of the reflector.

The reflector of claim 17, wherein the sampled grating portions reverse their grating 19. phase at a beginning and an end of each sampled grating portion.

20-29. (CANCELLED)